



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/583,712

10/02/2006

Johanna Buchert

Q95485

3244

23373 7590 07/12/2010  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

CALANDRA, ANTHONY J

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

07/12/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com  
PPROCESSING@SUGHRUE.COM  
USPTO@SUGHRUE.COM

Art Unit: 1791

*Advisory Action**Response to arguments**112 2<sup>nd</sup> rejections*

***The applicant maintains that in the present invention the laccase activity was determined using ABTS as a substrate at room temperature using a pH of 4.5. The applicant argues the specific conditions. The applicant asks for reconsideration of the rejection in view of evidentiary reference NIKU-PAA VULA.***

The applicant now argues that the laccase activity was determined using ABTS as a substrate, at room temperature and using a pH of 4.5. This conflicts with the applicant's previous arguments dated 12/08/2009 which stated that the specific condition is determined based upon the specific conditions of each chemical reaction [pg. 4 lines 1 and 2] and then even conflicts with the sentence in the current arguments "The *specific conditions of each chemical reaction are described in the working examples so that enzyme activity can be calculated in katal for each condition*". Either laccase activity is determined based upon a specific set of conditions or on varying conditions.

Further, the applicant's specification makes no mention of this newly defined method of determining laccase based upon ABTS at a pH of 4.5 and room temperature anywhere in the specification. Therefore the applicant fails to provide support for the first interpretation and if recited in a claim or in the specification would raise new issues under 112, first paragraph.

Furthermore such a claim would also raise new issues under 112, second paragraph since the applicant lists multiple conditions at which the reaction can take place [pg. 8 lines 4-12] and multiple reactants the claim language has no limit as to what 'nkat' can define as activity will change depending on different conditions as such 'nkat' is defined relatively. A claim term must be defined based on a standard that is recognizable to the person of ordinary skill in the art not a moving target.

The art provided by the applicant shows that an enzyme activity is defined at a specific temperature, with a specific substrate, at a specific pH, and specific time/substrate consumption [pg. 1988 column 1 paragraph 1].

*Art rejections**Jaschinski and Pederson*

The examiner has not considered the arguments towards non-entered amendments, specifically, that the prior art applied does not teach the oxidizer being applied as salts.

Art Unit: 1791

*Goodell*

***Argues that there is a requirement to pick and choose from the reference of Goodell of the two claimed species of quercetin and kaemferol.***

In response to the applicants argument regarding picking and choosing, a reference that clearly names the claimed species anticipates the claim no matter how many other species are named [see e.g. MPEP 2131.02]. In this case GOODELL clearly names both quercetin and kaemferol and therefore the claims stand anticipated.

***Applicant argues that the identified chelators do not expressly or inherently act as modifying agents and even if they did they would not provide the desired functional groups***

Goodell teaches adding quercetin or kaemferol to lignocellulose along with peroxide. Quercetin and kaemferol are the same species claimed in dependent claim 15. Peroxide is an agent capable of causing modification as per instant claim 29. The fact that the applicant has discovered that quercetin or kaemferol in addition to acting as redox cycling chelators also modify the surface of the fiber is not sufficient to overcome anticipation [see e.g. MPEP 2112 (I)].

The applicant has not shown a difference between the method steps of Goodell and the instant claims by which the instant claims would have quercetin bonded but Goodell wouldn't. Nor has the applicant explained why the surface modification be the same. Finally the applicant fails to claim any specific surface modification.

/Anthony J Calandra/

Examiner, Art Unit 1791

/Richard Crispino/

Supervisory Patent Examiner, Art Unit 1791